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Relative growth of Harpiosquilla raphidea (Fabricius, 1798) (Crustacea: Stomatopoda) male and female populations (Article)

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Abstract

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Morphometric analysis was carried out to find out changes in the growth pattern of male and female stomatopod, Harpiosquilla raphidea. Six morphometric relationships were examined on 105 males and 105 females, ranging in size from 103 to 207 mm and from 104 to 222 mm in total length, respectively. In both the sexes, the relative growth of carapace length, propodus length of raptorial claw and total weight in relation to total length was found positively allometric. Telson width in both the sexes and abdomen width in males showed slightly negative allometry, while the abdomen width of females showed slightly positive allometry, indicating some variation in the growth between sexes which could be attributed to the energy requirement for maturation in females. The propodus of females was also found to be bigger than that of males. It is quite interesting as males only have larger chela in other crustaceans. It has a functional significance in that it is of immense help at the time of intense feeding during maturation of oocytes which requires higher energy.

Author keywords

Harpiosquilla raphidea | Morphometric characters | Relative growth | Stomatopoda

Indexed keywords

GEOBASE Subject Index: allometry | crustacean | growth rate | morphometry | sex-related difference | size structure

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